U.S. Department of Health and Human Services Office of the National Coordinator for Health Information Technology



Long Term Care - Assessments AHIC Extension/Gap

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1.0 Preface and Introduction

1.1 Background

In April and June of 2008, the American Health Information Community (AHIC) approved a recommendation to develop documents that address extensions/gaps from the use cases published between 2006 and 2008. One of the extensions/gaps prioritized for subsequent processing in the national health agenda activities in 2009 was Long Term Care - Assessments. AHIC specifically requested that the 2009 Long Term Care - Assessments Extension/Gap address the electronic exchange of assessment information between Electronic Health Records (EHRs) to support long term care needs, including transfers of care, and the ability to incorporate and use assessment information in EHRs for long term care.

This extension/gap document is being developed by the Office of the National Coordinator for Health Information Technology (ONC) to represent AHIC priorities and provide context for the national health agenda activities, beginning with the selection of harmonized standards by the Healthcare Information Technology Standards Panel (HITSP). Interoperability components that need to be considered during the standards identification and harmonization activities include standardized vocabulary, data elements, datasets, and technical standards that support the information needs and processes of the clinicians and others who create or use long term care assessment information. This document is the Final AHIC Extension/Gap. Feedback received on the Draft AHIC Extension/Gap has been considered and incorporated into this document where applicable. HITSP has the opportunity to reuse standards, where applicable, from those previously recognized by the Secretary of Health and Human Services, to specify and constrain how they are to be used to advance interoperability and to work with standards development organizations to see that gaps in standards are filled.

1.2 Progress to Date

To date, the national health agenda, including the activities of AHIC and HITSP, has not formally addressed all of the interoperability considerations for the communication of Long Term Care - Assessments information.

Previously published AHIC use cases incorporate several concepts that have been evaluated by HITSP and could be leveraged during standards harmonization for this extension/gap.

Long Term Care - Assessments AHIC Extension/Gap



- The 2008 Consultations and Transfers of Care Use Case includes the needs for communicating clinical information between clinicians during consultations and transfers of care; and
- The 2007 Quality Use Case includes the needs for communicating information that can help promote healthcare quality and assist in quality measurement within healthcare settings. This use case also includes guidance regarding the frequency of assessments.



2.0 Overview and Scope

2.1 Document/Request Overview

This extension/gap document is focused on information needs to facilitate the electronic exchange of LTC - Assessment information. The 2009 Long Term Care - Assessments Extension/Gap Document is divided into the following sections:

- Section 1.0, Preface and Introduction, describes the progress to date, the additional priorities identified by the AHIC, the resulting extensions/gaps, and their purpose.
- Section 2.0, Overview and Scope, describes the sections of an extension/gap document, the request being made to HITSP, and the scope of that request.
- Section 3.0, Functional Needs, describes the combination of end-user needs and system behaviors that support interoperability and information exchange.
- Section 4.0, Stakeholder Communities, describes individuals and organizations that participate in activities described in this extension/gap.
- Section 5.0, Issues and Obstacles, describes issues and obstacles that may need to be planned for, addressed, or resolved to achieve the capabilities described in the extension/gap.
- Section 6.0, References to Use Case Scenarios, describes various scenarios and information exchanges that assist in the communication of information.
 Scenarios may be from previously published 2006 – 2008 Use Cases and/or new scenarios may be described.
- Section 7.0, Information Exchange, describes information exchange capabilities needed to support the scenarios and the high-level information exchanges.
- Section 8.0, Dataset Considerations, identifies specific opportunities for identification of information and/or data relevant to this extension/gap document. These opportunities may support future identification, development, and harmonization of standards.
- Appendix A, Glossary, provides contextual descriptions of key concepts and terms introduced in this extension/gap document.



 Appendix B, Analysis and Examples, identifies specific data types, datasets, data elements, vocabularies, naming conventions, capabilities, and technical standards that may support future industry efforts in the identification, development, and harmonization of standards.

2.2 Scope

Long Term Care (LTC) - Assessments includes considerations for clinicians and others to assess and evaluate LTC patients and to communicate patient status. This assessment is typically comprised of generally accepted question/answer pairings to evaluate patients, in this case, related to LTC. In general, LTC – Assessments are used to conduct an initial and recurring appraisal of patient functional and cognitive abilities. Standardized LTC – Assessments may aid clinical documentation by gathering information related to this assessment in EHRs and support care by communicating information in this assessment to other providers, consumers, and/or payors.

This extension/gap document includes information needs related to electronic support for completion of a LTC - Assessment and the subsequent communication of LTC - Assessment information. This document does not intend to address the processes for coordinating assessments between clinicians.

This extension/gap document includes a reference to the 2008 Consultations and Transfers of Care Use Case. This earlier use case has been supported by the efforts of HITSP and others to develop standards related to assessments. Standards related to LTC – Assessments are being developed and refined, including efforts to address remaining gaps in this area.

Therefore, the requirements for LTC - Assessments can be summarized as:

- The ability to communicate, incorporate, and use standardized LTC –
 Assessment information in EHRs in conducting patient assessments;
- The ability to communicate completed LTC Assessments from EHRs to others (e.g., LTC clinicians, inpatient clinicians, other clinicians, EHRs, payors, and others);
- The ability to incorporate and use LTC Assessment information and schedules in EHRs to support timely completion of LTC - Assessments; and
- The ability to communicate de-identified LTC Assessment data to Population Health and others in support of activities and programs related to LTC populations.



LTC – Assessments may be standardized to describe a set of questions and answer pairings, the sequencing, logic, and other details related to the pairings. Details may include standardized categories, questions, answers, and other information to support the LTC - Assessment of body systems, functional status, and cognitive status. This LTC – Assessment information is considered part of a LTC – Assessment form and is not yet patient-specific. The communication of this information supports a consistent, standardized method for conducting patient assessments.

When a LTC - Assessment has been completed it will include answers to standardized questions which are patient specific, as well as other patient specific information. Standardized data elements, appropriate message streams and message transport considerations, and other information may be required to communicate assessment information to another clinician, system, or setting.

The identification, development, and harmonization of standards to support the interoperability associated with LTC - Assessments has been preliminarily addressed but requires additional work with standards and professional organizations, care delivery organizations, and organizations providing information technology services and products to the healthcare industry. As mentioned in Section 1.0, the needs expressed here have not yet been fully addressed by the national health agenda's standardization efforts. Examples of gaps in industry standards are outlined in the upcoming sections of this extension/gap document.



3.0 Functional Needs

This section describes a combination of end-user needs and system behaviors to support users during the exchange of LTC – Assessment information between EHRs, payors, and others. Support for this exchange includes the development of interoperability standards for vocabularies, data elements, datasets, and other technical components that are implicit in these functional needs. Rather than an all-inclusive list of functional requirements, key capabilities are outlined below. The descriptions in this section are not intended to prescribe policy nor propose architectures required to implement capabilities.

- A. The ability to communicate, incorporate, and use standardized LTC Assessment information in EHRs in conducting patient assessments.
 - Providers may benefit from the ability to receive standardized LTC Assessment information from organizations that support electronic communication of standardized assessments.
 - The standardized assessment information may be received from knowledge suppliers, payors, and other organizations that may supply information regarding conducting LTC – Assessments.
 - ii. Providers may benefit from the ability to incorporate and use standardized LTC Assessment information in EHRs that supports LTC - Assessment form structure, logic, and question/answer pairings necessary for standardizing LTC -Assessment output information.
 - a. The LTC Assessment information may include standardized assessments with generally accepted question/answer pairings used to evaluate patients within a LTC environment.
 - The details related to these pairings, sequencing, logic, and similar information may be necessary to enable a complete understanding of patient status.
 - iii. Once incorporated into an EHR, the standardized assessment form and accompanying information may be used to complete a patient LTC Assessment within an EHR system.
 - a. Assessments may be completed by providers but may include components that require patient supplied information that can be verified by providers.
 - b. Assessments may be supported by information contained within EHRs. This information may be linked (e.g., by a common vocabulary) to clinical content contained within EHRs.



- c. LTC Assessments that have been completed may be accessed via EHRs or similar systems used for monitoring patient health and trends.
- d. The information included in LTC Assessments may also be used to support potential care transitions, such as between a LTC facility and an acute care hospital.
- B. The ability to communicate completed LTC Assessments from EHRs to others (e.g., LTC clinicians, inpatient clinicians, other clinicians, EHRs, payors, and others)
 - LTC Clinicians and others may benefit from the ability to access completed LTC -Assessments from EHRs and other systems and communicate this information to others. For example, this capability could support transitions between rehabilitative care facilities and LTC facilities.
 - ii. LTC Assessments which have been completed may be included with other standardized clinical care documentation, including required and optional patient specific information.
 - iii. Clinicians and others may benefit from the ability to receive, incorporate, and use LTC Assessments which have been completed for specific patients.
 - a. This could support transitions in care including appropriate patient placement and care planning.
 - b. As above, this completed LTC Assessment information may be complemented by additional clinical information supporting a care transition.
 - iv. Clinicians and others may need the ability to incorporate and use information derived from EHR sources in a LTC Assessment. For example, information about medications, allergies, functional abilities, or other types of information may already be included within the patient's EHR and may be a valid source of information for completing the LTC Assessment.
- C. The ability to incorporate and use LTC Assessment information and schedules in EHRs to support timely completion of LTC Assessments.
 - Providers may benefit from the ability to receive, incorporate, and use knowledge from various sources regarding LTC – Assessment information and schedules.
 This information may support on-going LTC quality measurements as well as potential transitions in care as described in the 2007 Quality Use Case.
- D. The ability to communicate de-identified LTC Assessment data to Population Health and others in support of activities and programs related to LTC populations.



 Population Health may benefit from the ability to receive de-identified LTC -Assessment information to support population health or research activities for medical conditions and additional assessment information available from LTC-Assessments.



4.0 Stakeholder Communities

Examples of stakeholders who may be directly or indirectly involved in the exchange of LTC – Assessment information have been listed below. Specific descriptions of each type of stakeholder can be found in the previous 2006 – 2008 AHIC Use Cases.

Stakeholders that may be directly involved in the exchange of LTC – Assessment information may include: Clinicians (including LTC Clinicians), Clinical Support Staff, Healthcare Entities, Consumers, and Healthcare Payors.

Stakeholders that may assist in LTC – Assessment information communication may include: EHR System Suppliers, LTC System Suppliers, Health Information Exchange Organizations, PHR System Suppliers, Quality System Suppliers, and Payor System Suppliers.

Stakeholders that may be sources or recipients of LTC – Assessment information may include: Clinicians, Healthcare Entities, Patients, Consumers, Knowledge Suppliers, and Healthcare Payors.



5.0 Issues and Obstacles

A number of issues in today's health information technology environment are obstacles to achieving the healthcare data standardization and interoperability to promote patient safety, reduce healthcare costs, and increase the value of electronic health information exchange. Some general issues were described within the 2006 – 2008 AHIC Use Cases. Examples of specific issues and obstacles related to LTC - Assessments are outlined below.

A. Standardization of Patient Assessment Information:

- To be able to effectively share information on patient assessments, providers may need consistent methods and tools for capturing patient assessment information.
 - a. Without standardized patient assessment information, shared assessment information may be difficult to interpret and use to support patient care.

B. Standardization of Assessment Information Communication:

- To be able to effectively share information on patient assessments, interoperability standards may be needed to ensure effective packaging of completed assessment information.
 - a. Without standardized assessment information communication, shared assessment information may be difficult to interpret and use.

C. Patient Privacy:

- i. Sharing patient assessment information may require appropriate privacy, security, and confidentiality protections to manage access. Additionally, at times, LTC Assessments may include behavioral health information, which may add need-to-know constraints on some assessment information. Also, laws in this area may differ from state to state.
 - a. Without appropriate permissions and controls, patient privacy concerns could limit the communication of patient assessment information.
 - b. Without sufficient patient privacy safeguards regarding the handling of behavioral health information, shared patient assessment information may be incomplete or limited.



D. Proxy and Assessment Data:

- Patient LTC Assessment may benefit from involvement from patient proxies, such as family members, as patient assessment information is gathered and communicated. Existing regulations may not be adequate to support these needs.
 - a. Without sufficient proxy permissions and controls, the communication of patient assessment information could be limited or cumbersome, impeding effective, timely care.



6.0 References to Use Case Scenarios

2009 Long Term Care (LTC) - Assessments Extension/Gap document includes standardization and interoperability considerations for clinicians and others to assess and evaluate patients. Specific events and information exchanges have been selected from previous use cases for contextual purposes.

The 2008 Consultations and Transfers of Care Use Case contains a scenario that describes needs for communicating LTC – Assessment information between providers, payors, and/or related systems as well as the incorporation of this information into EHRs. The applicable scenario and information flows from the Consultations and Transfers of Care Use Case are included as Figure 6-1.

The events and information flows that are pertinent to the 2009 LTC - Assessment Extension/Gap are shown in bold. All other events and information flows are illustrated in faded text.



6.1 Reference to Prior Use Case: 2008 Consultations and Transfers of Care (Scenario 1)

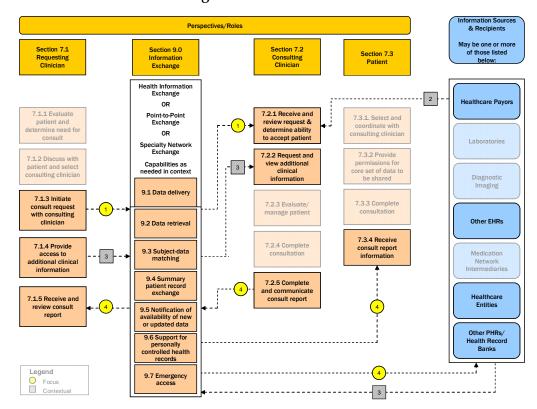


Figure 6-1. Consultations

As expressed in the 2008 Consultations and Transfers of Care Use Case, events 7.1.3, 7.2.1, and information flow 1 show the communication of information to support a consultation. Information can be communicated from a requesting clinician to a consulting clinician using information exchanges. Similarly, events 7.1.4, 7.2.2, and information flow 3 support the consultation, showing the ability for consulting clinicians to request and view additional clinical information, which can also come from other sources. Events 7.1.5, 7.2.5, and information flow 4 show the communication of consultation result reports, which are communicated from a consulting clinician to a requesting clinician using information exchange and can be similarly communicated to payors and other recipients.

For the 2009 LTC – Assessments Extension/Gap, requesting and consulting clinicians could communicate LTC - Assessment information to assist with consultations. This information could also be shared with appropriate recipients, including consumers, patients, payors, and others. LTC – Assessment information could be complemented with other clinical information. Therefore, information flows 1, 3, and 4 should be referenced when addressing LTC – Assessments.



6.2 Reference to Prior Use Case: 2008 Consultations and Transfers of Care (Scenario 2)

nformation Source Perspectives/Roles & Recipients 8.1 Discharging/ 8,2 Receiving 9.0 Information Section 8.3 of those listed Transferrin Setting Exchange Health Information Healthcare Payors Exchange 8.2.1 Receive and OR 8.1.1 Determine 8.3.1. Receive Point-to-Point Exchange data Laboratories to accept patient OR Specialty Network Exchange 8.1.2 Select next 8.2.2 Accept setting of care & discuss with patient & coordinate transfer Capabilities as patient/family needed in context Imaging 9.1 Data delivery 8.2.3 Receive and 8.1.3 Initiate plan Other EHRs discharge/transfer manage patient 9 2 Data retrieval 8.1.4 Discharge/ 8.2.4 Access Transfer patient & transmit available Network Intermediaries data transfer data 9.4 Summary patient record exchange 8.1.5 Transmit 8.2.5 Continue to (4) **Entities** manage patient completion 5 Other PHRs 8 1 6 Provide or updated data access to additional patient 5 9.6 Support for data controlled health records Legend Focus 9.7 Emergency

Figure 6-2. Transfers of Care

As expressed in the 2008 Consultations and Transfers of Care Use Case, events 8.1.2 and information flow 1 show eligibility and coverage information for a potential transfers of care being communicated from discharging/transferring setting to a receiving setting via information exchange. Similarly, events 8.1.3, 8.2.1, and information flow 2 support preparation for a transfer of care. Events 8.1.4, 8.1.5, and 8.2.3 as well as information flows 3 and 4 show the communication of patient information upon discharge and an associated admission.

In the 2009 LTC – Assessments Extension/Gap, the same information flows could include standardized LTC - Assessment form information as well as LTC - Assessments which have been completed for specific patients, communicated through the same information exchange mechanisms. This could include the communication of standardized LTC - Assessment information for use when conducting patient assessments. Completed LTC - Assessment information could support appropriate patient placement, preparations for transfers/discharges, and appropriate information exchange upon actual discharge and admission. This information could also be shared with consumers and patients as well as other entities with a role in patient care as shown in Figure 6-2, the Transfers of Care



scenario. Therefore, information flows 1, 2, 3, and 4 should be referenced when addressing LTC – Assessments.



7.0 Information Exchange

The information exchange requirements for the effective selection and communication of LTC – Assessment information may comprise:

- The ability to communicate, incorporate, and use standardized LTC Assessment information in EHRs when conducting patient assessments;
- The ability to communicate completed LTC Assessments from EHRs to others (e.g., LTC clinicians, inpatient clinicians, other clinicians, EHRs, payors, and others);
- The ability to incorporate and use LTC Assessment guidelines and schedules in EHRs to support timely completion of LTC - Assessments; and
- The ability to communicate de-identified LTC Assessment data to Population Health and others in support of activities and programs related to LTC populations.

Examples of information exchange capabilities described above and in Section 2.0 may include: Data Delivery, Data Retrieval, Subject Data Matching, Summary Patient Record Exchange, Notification of Availability of New or Updated Data, Support for Personal Health Records, and Emergency Access. Descriptions of each of these are in the previous 2006 – 2008 AHIC Use Cases.

The functional capabilities may be provided fully or partially by a variety of organizations including: health information exchange organizations, integrated care delivery networks, provider organizations, specialty networks, and others.

While not described in this section, Health Information Exchange (HIE) and Point-to-Point exchanges assist in the completion of the processes described in this extension/gap. Examples of HIEs and Point-to-Point exchanges can be found in the previous 2006 – 2008 AHIC Use Cases.



8.0 Long Term Care - Assessments Dataset Considerations

The following non-exhaustive information categories and limited examples illustrate some of the information needs from this extension/gap document. This information could be contained within a variety of documents and document types.

Examples of routinely used LTC – Assessment information, as well as a brief analysis of the dataset are included in Appendix B.

A. Administrative Information

- Patient Identification Information
- ii. Demographic Information

B. Clinical/Status Information

- i. Patient History
 - a. Problems/Conditions List
 - b. Medications
 - c. Treatments/Procedures
- ii. System/Status Information
 - a. Ear, Nose, and Throat
 - b. Gastrointestinal (Including Incontinence)
 - c. Respiratory
 - d. Cardiac
 - e. Genitourinary
 - f. Integumentary
 - g. Neurological
 - h. Intake and Outputs
 - i. Musculoskeletal



iii. Emotional and Cognitive Information

- a. Psychological
- b. Behavioral
- c. Restraints

iv. Functional Status

- a. Hearing, Speech, and Vision (Including Relevant Relationships with Functional Practical Activities)
- b. Activities of Daily Living (Including Measures of Ambulation, Endurance, and Social Participation)
- c. Sensory Status (Including Patient Safety Considerations)
- d. Physical Assists
- e. Pain Assessment



Appendix A: Glossary

The 2006 – 2008 AHIC Use Cases contained general terms and their contextual descriptions. Listed below are the new terms that are specific to this extension/gap.

Assessment Information: This is a set of information used to develop and complete an initial and recurring appraisal of patient functional and cognitive abilities.

Clinical Support Staff: Individuals who support the workflow of clinicians.

Clinicians: Clinicians are healthcare providers with patient care responsibilities, including physicians, advanced practice nurses, physician assistants, nurses, psychologists, pharmacists, dentists, oral surgeons, and other licensed and credentialed personnel involved in treating patients. References to "clinicians" in this document are intended to be for specific cases where only a clinician can fill the given role. See "Providers".

Consumers: Members of the public that include patients as well as caregivers, patient advocates, surrogates, family members, and other parties who may be acting for, or in support of, a patient receiving or potentially receiving healthcare services.

Health Information Exchange (HIE): The electronic movement of health-related data and information among organizations according to specific standards, protocols, and other agreed criteria. These functional capabilities may be provided fully or partially by a variety of organizations including free-standing or geographic health information exchanges (e.g., Regional Health Information Organizations (RHIOs)), integrated care delivery networks, provider organizations, health record banks, public health networks, specialty networks, and others supporting these capabilities. This term may also be used to describe the specific organizations that provide these capabilities such as RHIOs and Health Information Exchange Organizations.

Healthcare Entities: Organizations that are engaged in or support the delivery of healthcare. These organizations could include hospitals, ambulatory clinics, long-term care facilities, community-based healthcare organizations, employers/occupational health programs, school health programs, dental clinics, psychology clinics, care delivery organizations, pharmacies, home health agencies, hospice care providers, and other healthcare facilities.

Healthcare Payors: Insurers, including health plans, self-insured employer plans, and third party administrators, providing healthcare benefits to enrolled members and reimbursing provider organizations.

LTC Systems: Long-Term Care (LTC) facilities may have specialized EHR systems to support their specialized needs and this system may be considered a LTC system. Other settings (e.g., home care, day care, and senior centers) for LTC may have similar systems.



Suppliers of these systems include developers, providers, resellers, operators, and others who may provide these or similar capabilities.

Patients: Members of the public who receive healthcare services.

Providers: Providers are the healthcare personnel within healthcare delivery organizations with direct patient interaction in the delivery of care, including physicians, nurses, psychologists, clinicians, dentists, oral surgeons, and other professionals. This can also refer to healthcare delivery organizations. In this document, this term is intended to be more generic than "clinicians" as it can include organizations and systems in some cases. See "Clinicians".

Resident: A reference to an individual receiving treatment in a nursing home or residential care facility.



Appendix B: Analysis & Examples

An analysis of the information exchange components associated with LTC - Assessments and examples of potential mechanisms are included in this appendix. These examples are not intended to be inclusive of all activities in this area.

The following systems used by the Centers for Medicare & Medicaid Services (CMS) make wide use of systems and datasets to support their operations. While this section includes some discussion of these sample datasets, there are many other assessment-related datasets that could be considered as a part of this extension/gap.

MDS version 2.0 (MDSv2): The Long Term Care Minimum Data Set (MDS) is a standardized, primary screening and assessment tool of health status that forms the foundation of the comprehensive assessment for all residents in a Medicare and/or Medicaid-certified long term care facility. The MDS contains items that measure physical, psychological, and psychosocial functioning. The items in the MDS give a multidimensional view of the patient's functional capacities and helps staff to identify health problems.

The MDS is one of several patient assessment tools, the use of which is required by the Federal Government as part of reimbursement and regulation. The nursing home MDS, along with other required assessment instruments, is comprised of human-readable question and answer pairs, the responses to which are computer-readable. That is, the MDS is a "form" that can be completed in a way that produces data that can be manipulated by computers. This data is submitted to regulatory and reimbursement authorities.

Its content has implications for residents, families, providers, researchers, and policymakers, all of whom have expressed concerns about the reliability, validity, and relevance of MDS 2.0. Some argue that because MDS 2.0 fails to include items that rely on direct resident interview, it fails to obtain critical information and effectively disenfranchises many residents from the assessment process. In addition, many users and government agencies have expressed concerns that the structure, length, and data collection burden of the MDS 2.0 exacerbate problems with data quality and validity when the MDS is collected by actual nursing home staff.

MDS version 3.0 (MDSv3): In response to changes in nursing home care, resident characteristics, advances in resident assessment methods, and provider and consumer concerns about the performance of the Minimum Data Set (MDS) 2.0, CMS contracted with RAND Corporation and Harvard University to undertake a significant revision and national testing of Version 3.0 of the MDS.

The goals of the MDS 3.0 revision were to introduce advances in assessment measures, increase the clinical relevance of items, improve the accuracy and validity of the tool, and increase the residents' voice by introducing more resident interview items. Providers,



consumers, and other technical experts in nursing home care requested that MDS 3.0 revisions focus on improving the tool's clinical utility, clarity, and accuracy. CMS also wanted to shorten the tool while maintaining the ability to use MDS data for quality indicators, quality measures, and payment (resource utilization groups-III [RUGs-III] classification).

In addition to improving the content and structure of the MDS, the RAND/Harvard team effort also aimed to improve user satisfaction. User attitudes are key determinants of quality improvement implementation.

CARE Tool: The Continuity Assessment Record & Evaluation (CARE) tool is an internet-based patient assessment instrument. The CARE tool will measure the health and functional status of Medicare acute discharges and measure changes in severity and other outcomes for Medicare Post Acute Care (PAC) patients.

The assessment tool is being designed to eventually replace similar items on the existing Medicare assessment forms, including the OASIS, MDS, and IRF-PAI tools. The web-based technology allows for future changes in the data sets to incorporate advances in evidence-based medicine.

Four major domains are included in the tool: medical, functional, cognitive impairments, and social/environmental factors. These domains either measure case mix severity differences within medical conditions or predict outcomes such as discharge to home or community, re-hospitalization, and changes in functional or medical status.

OASIS: Medicare-certified home health agencies are required to use a standard set of data items, known as OASIS (Outcome and Assessment Information Set) as part of a comprehensive assessment for all patients who are receiving skilled care that is reimbursed by Medicare or Medicaid. OASIS data are submitted by home health agencies to the States, and subsequently transmitted to CMS. These data form the basis for patient case mix profile reports and patient outcome reports that are used by home health agencies for quality improvement and quality monitoring purposes and by state survey staff in the certification process. Home health agency quality measures that appear on the CMS Home Health Compare website are also based on OASIS data, and the data are used for case-mix adjustment of per-episode payment.

IRF-PAI: Inpatient rehabilitation utilizes Inpatient Rehabilitation Facility - Patient Assessment Instrument (IRF-PAI) as their assessment tool. IRFs are free standing rehabilitation hospitals and rehabilitation units in acute care hospitals. They provide an intensive rehabilitation program and patients who are admitted must be able to tolerate three hours of intense rehabilitation services per day. CMS collects patient assessment data only on Medicare Part A fee-for service patients. These facilities are exempt from the Medicare Hospital PPS and are paid under the IRF Prospective Payment System (PPS) effective 1/1/2002. In order to be paid under the IRF PPS, they must submit the IRF-PAI (patient assessment instrument). The IRF-PAI is a patient assessment instrument currently



utilized by CMS (the other two are the MDS in nursing homes and OASIS in home health agencies).

Long Term Care Nursing Home Electronic Health Record (LTC NH EHR) Functional Profile: This HL7 document identifies the features and functions necessary to create and manage an EHR for Long Term Care. Some of these features and functions could support Long Term Care – Assessments.

In addition, there are several activities currently underway to assist with the development of standards to support LTC – Assessments. Some examples of these activities are:

- MDS2 to MDS3 mapping available on CMS website
- CARE Tool to HITSP Constructs and HL7 CCD Modules under development
- The Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE) has sponsored work linking HIT standards to the MDSv2. ASPE is sponsoring work to link HITSP standards to the new assessment instruments: (1) the Nursing Facility Minimum Data Set Version 3 (MDSv3); and (2) the Home Health Outcome and Assessment Information Set Version C (OASIS-C). In addition, the ASPE contract requires the development of a CDA Implementation Guide (IG) for the MDSv3. ASPE is working with the HL7 Standards Development Work Group as it develops and ballots the CDA IG for assessments.